

**Notice of Allowability**

Application No.

09/409,146

Applicant(s)

SUZUKI ET AL.

Examiner

Art Unit

Inder P Mehra

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment dated: 9/15/04.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ The drawings filed on 15 September 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to Amendment dated 9/15/04. Based on this amendment, claims 1-3 and 8-11 have been amended. Claims 1-11 are pending.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brian S. Myers, Attorney, Regd. No. 46,947 on 12/20/04.

The application has been amended as follows:

- a. In claim 1, line 8, "the high-order network" has been changed to "high-order node network".
- b. In claim 1, line 10, "the high-order network" has been changed to "high-order node network".
- c. In claim 2, line 8, "the high-order network" has been changed to "high-order node network".
- d. In claim 2, line 10, "the high-order network" has been changed to "high-order node network".
- e. In claim 3, line 8, "the high-order network" has been changed to "high-order node network".

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- f. In claim 3, line 10, “the high-order network” has been changed to “high-order node network”.

*Allowable Subject Matter*

3. Claims 1-11 are allowed.

**REASONS FOR ALLOWANCE**

4. The following is an examiner’s statement of reasons for allowance:

The prior art of record does not disclose, suggest or teach fairly the following limitations of the claims in combination with other limitations of the claims:

As recited by claim 1,

“a host change request section making a request to the second high-order node that the second high-order node serves as a high-order node for the first low-order node in place of the first high-order node when the detection section detects the communication failure; and

a low-order node setting section performing processes for causing the first low-order node to transmit data to the second high-order node in place of the first high-order node on the basis of process information transmitted from the second high-order node, wherein the selecting section selects the second output port as one of the processes,

wherein the second high-order node comprising:

a high-order node setting section performing at least one process for causing the second high-order node to transmit data received from the first low-order node to another low-order node corresponding to a destination of the data according to the request of the host change request section; and

a process information transmission section transmitting the process information corresponding to the process performed by the high-order node setting section to the first low-order node”

As recited by claims 2-3,

“a low-order node setting section performing at least one process for causing the first low-order node to transmit data to the second high-order node in place of the first high-order node on the basis of the process information transmitted from the process information transmission section. wherein the selecting section selects the second output port based on the process information”.

As recited by claim 3,

a first low-order nodes is provided on the high-order network as one of the plurality of low-order nodes, wherein the first low-order node is connected to the first and second high-order nodes via at least one physical line, and includes a first output port to transmit data to the first high-order node via said at least one physical line. a second output port to transmit data to the second high-order node via said at least one physical line, and a selecting section to select one of the first and second output ports in order that the first-low-order node transmits data to one of the first and second high-order nodes”: and

As recited by claim 8,

“the first low-order node detecting a communication failure between me first high-order node and the first low-order node. wherein the first low-order node is connected to the first and second high-order nodes via at least one physical line. and includes-a first output port to transmit data to the first high-order node via said at least one physical line. a second output port to

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transmit data to the second high-order node via said at least one physical line. and a selecting section to select one of the first and second output ports in order that the first low-order node transmits data to one of the first and second high-order nodes. and the first low-order node detects the communication failure when the first output port is selected by the selecting section;

the first low-order node requesting to the second high-order node that the second high-order node serves a high-order node for the first low-order node in place of the first high-order node when the communication failure between the first low-order node and the first high-order node is detected;

the second high-order node ' recognizing the first low-order node as the low-order node of the second high-order node itself according to the request from the first low-order node and transmitting to the first low-order node, process information including updated path information serving as new path information corresponding to a transfer route using passing through the second high-order node; and

the first low-order node receiving the process information with updated path information transmitted from the second high-order node and updating the contents of a memory sectioned which has stored path information to be added to data when the data is transmitted to the second high-order node, on the basis of the updated path information, wherein the selecting section selects the second output port based on the process information”.

As recited by claims 9-11,

the first high-order node detecting a communication failure between the first low-order node and the first high-order node. wherein the first low-order node is connected to the first and

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second high-order nodes via at least one physical line, and includes a first output port to transmit data to the first high-order node via said at least one physical line. a second output port to transmit data to the second high-order node via said at least one physical line. and a selecting section to select one of the first and second output ports in order that the first low-order node transmits data. to one of the first and second high-order nodes, and the first. high-order node detects the communication failure when the first output port is selected by the selecting section;

the first high-order node requesting to the second high-order node that the second high-order node serves as the high-order node for the first low-order node in place of the first high-order node when the communication failure between the first low- order node and the first high-order node is detected;

the second high-order node recognizing the first low-order node as the low-order node of the second high-order node itself according to the request from the first high-order node, and transmitting to the first low-order node, process information including updated path information serving as new path information corresponding to a transfer route using passing through the second high-order node; and

the first low-order node receiving the process information with the updated path information transmitted from the second high-order node and updating contents of a memory section, which has stored path information to be added to data when the data is transmitted to the second high-order node on the basis of the updated path information. wherein the selecting section selects the second output port based on the process information”.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Inder P Mehra* 12/20/04  
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